

ABSTRACT

An air turbine starter for use in aircraft or other gas turbine engine applications. In a particular embodiment, the air turbine starter has a titanium unitary inlet structure. The unitary inlet structure has a housing having a longitudinal centerline. The housing defines an air inlet, a mounting surface, and a flow path therebetween. Integrally formed inside the housing and transverse to the longitudinal centerline is a stator for directing the flow of air in to the turbine blades of the turbine starter. The stator has a central circular body with a plurality of angularly spaced circumferentially mounted stator fins. An improved unitary inlet structure and method for making such a unitary inlet and stator are also provided.

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